

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET

(pursuant to NAC 445A.236)

Permittee Name: El Dorado Energy, L.L.C. - El Dorado Energy Power Plant

Permit Number: NEV98011 - a Zero Discharge Standard of performance permit.

Description of Discharge Water from evaporative cooler blowdown and cooling tower air conditioning facilities, water from floor drains and washdown water, the wastestream (brine) from the reverse osmosis water treatment plant, and effluent from the oil-water separator are pumped to evaporation ponds. Incident stormwater and the runoff from concrete pads under the turbines are drained to the evaporation ponds.

Location: The El Dorado Energy Combined Cycle Natural Gas Turbine Power Plant is located at 701 El Dorado Valley Drive, Boulder City, Nevada 89006-2470. El Dorado is a 465 megawatt facility located on 138 acres in the Solar Enterprise Zone. The plant site is situated 16 miles southwest of Boulder City, in El Dorado Valley, Clark County, Nevada. U.S. Highway 95 lies 2.5 miles east of the plant site. The site is served by a light duty asphalt road that provides access for three adjacent switch yards, the former Copper Mountain Power, L.L.C. (NEV2001512-cancelled) facility property, and the Nevada Solar One facility. .

Latitude: 35° 47' 17"N; Longitude: 114° 59' 36" W
Section 12, T. 25S., R. 62E. MDB&M

Characteristics:

Flow: Monitor and Report. A flow of 0.1761 MGD (122 GPM) is the 30-Day average flow to ponds, and a daily Maximum 0.3478 MGD (242 GPM) reported from historical data.

Parameters: Monitored and Reported Quarterly

TDS, pH, Oil and Grease, and TPH

General: El Dorado Energy, L.L.C. operates the El Dorado Energy Combined Cycle Gas Turbine Power Plant. The facility power plant consists of two 160 megawatt combustion turbines, two natural circulation-supplementary fired heat recovery steam generators (HRSGs), and one 145 megawatt steam turbine generator with an air cooled condenser. The combustion turbines are designed to burn natural gas. The plant design life is 30 years.

Water supplied to the El Dorado plant is purchased from Boulder City and originates from Lake Mead. Water is delivered to the plant via pipeline and used directly for potable and service water. Some water is demineralized by a Reverse Osmosis and ion exchange treatment prior to use as boiler feed water for a steam turbine. A mixture of potable water and demineralized water will be used as makeup water to the evaporative cooler. Water

that is collected in drains which can contain oil is passed through an oil/water separator before being pumped into the evaporation pond. The pond is constructed in three cells with 8 acres of surface area each. Each cell is individually lined with two 60-mil thick HDPE geomembrane liners with a Leak Detection and Removal System (LDRS) installed between the two liners to detect and automatically remove leakage through the inner liner. The inner liner is covered with a 12-inch thick layer of prepared cover material to prevent wind uplift, mechanical damage and other types of damage. The interior side slopes are covered with riprap to limit solar exposure and to prevent wind and water erosion of the liner material. A rock surfaced road surrounds the top of all berms to provide maintenance access. The exterior surface of the pond berms are covered with a 6-inch layer of coarse rock for erosion protection.

The influent system is designed so each cell can operate independently should a cell be required to be shut down for maintenance. The entire pond area is fenced with a 6-foot high chain link fence topped with barbed wire. Tortoise protection fences are installed at the base of the chain link fencing.

The Permittee has applied for renewal of a permit to discharge the facility wastestreams to the evaporation pond (3 cells) for disposal via evaporation.

Receiving Water Characteristics: Groundwater below the plant and within a 6 mile radius is in excess of 300 feet below ground surface. Two wells drilled to supply the adjacent substations have static water levels of 317.5 feet and 350 feet below ground surface. Water quality is generally good with the exception of elevated pH (8.98 SU) and iron (1.58 mg/L).

Procedures for Public Comment:

The notice of the Division's intent to reissue a permit authorizing the facility to discharge to the evaporation pond cells subject to the conditions contained within the permit, is being sent to the **Las Vegas Review-Journal and Boulder City News** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, or any interested agency, person or group of persons.

The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing scheduled by the Administrator must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Proposed Determination

The Division has made the tentative determination to renew the proposed permit for a 5-year period.

Proposed Effluent Limitations, Schedule of Compliance and Special Conditions

Flow:	No limit, monitor and report.
TDS:	Monitor and Report

pH:	Monitor and Report
Oil & Grease:	Monitor and Report
TPH:	Monitor and Report

Rationale for Permit Requirements Monitoring is required to characterize the water quality contained in the evaporation ponds and the quantity disposed into the ponds.

Prepared by: Icyl Mulligan
(07/08)